

under 35 U.S.C. §103 as being unpatentable over Ross in view of Plourde.

The Applicant's invention relates to one-way vision or see-through panels of the type in which a graphic image is applied to a flexible substrate. The substrate is perforated and adhered to a glass surface providing the one way vision characteristics.

5 Conventional practice has been to print these images on such panels by techniques such as silk screening or lithographics. The Applicant's claims relate to the use of ink jet technology for creating a superior image on see-through vision panels. In order to obtain the necessary high quality image, the flexible film, such as a polyester film, is top-coated in order to encapsulate and absorb the ink and provide the degree of resolution necessary.

10 Dyes and inks used in ink jet applications are hydrophilic and will laterally migrate when applied to the film. The Applicant suggests various substances may be used to encapsulate the dyes and pigmented ink and prevent bleed. Synthetic films used in one way panels, such as polyesters and vinyl, which are not top-coated, will not absorb certain types of ink, particularly dyes and pigmented inks. Top-coating, as suggested by the

15 Applicant, may be clays, resins, gels or latex combination coating.

Turning now to the rejection, the Examiner acknowledges that Shields fails to teach that the first surface of shield is provided with an ink jet receptive coating. The Examiner further states Plourde discloses plastic signage substrate provided with an adhesive and suggests print receptive coatings. Plourde relates to cling-signage, specifically flexible sheets which can be repeatedly, releasably engaged on a flat surface. Plourde suggests a laminate structure having a top layer which is a print receptive coating

and the print coating will vary in composition depending on the print market in which it will be used. The patentee goes on to state that polyvinyl pyrolindones and ethyl celluloses are known to work in ink jet applications but does not suggest any coating that will work in the "print market" of one-way vision panels. In the illustrative example given, a polyester film is provided with a first layer which is a print coating, a layer which is a cling-elastomeric coating and a layer 16 which is a protective film. A layer 18 is applied which is a coating to impart frictional surface characteristics to the film. The print coating applied by roller and transferred to the film and more specifically the coating is stated to be polymethacrylate film with silica.

Thus, what can be fairly gleaned from the patent is cling-signage can be treated to receive ink. The treatment suggested for ink jet applications are polyvinyl pyrolindones and ethyl cellulose. There is no suggestion in the Plourde patent that agents can be used to encapsulate the ink. This is an important feature for outdoor durability which is the use environment of many of the one-way panels. Further, the specific example given with reference to Figure 2 refers to PET coated with polymethacrylate filled with silica. The coating is applied so that the sheet can be stored and used for laser printers, rather than ink jet printers.

The Shields '938 patent has been discussed previously and deals with one-way vision panels. However, the patent speaks only in general terms as to coatings. Referring to Column 6, Lines 59 through 68, the patentee states the panel has an image which is printed or otherwise applied to one face of the panel. The image preferably comprises a

coating of colored inks or dyes which reflect incident light to create the desired visual impression. The image may be applied by laser inking process, by silk screening, litho or a similar inking processes. There is no suggestion in Shields to use ink jet printing in connection with one-way panels. Rather, Shields suggests the traditional ways of 5 imaging one-way panels such as silk screen litho or the like. One would have to extrapolate Shields beyond its teachings and then look to Plourde for a suggestion of ink jet printing. However, Plourde, as pointed out above, suggests ink printing only in connection with another type of signage that of cling-signage. Further, Plourde does not suggest the use of encapsulated agents as the top coating. Thus, it is that the rejection 10 under §103 on the combination of Shields and Plourde is not fairly suggested and would not result in Applicant's invention.

The combination of Ross and Plourde is similarly deficient. The Ross '529 patent also deals with see-through panels. Despite its voluminous text, the specification only generally recognizes the use of ink jet printing in connection with signage, along with a 15 broad ranger of coating techniques such as printing, electrostatic transfer and the like. Also the patent suggests the use of various bases such as water, transfer paper or base materials of metal, plastic or other durable materials. Accordingly, the patentee generally suggests a wide variety of materials and coating methods, but is devoid of any recognition of the problems of adhering ink jet dyes to surfaces of flexible substrates.

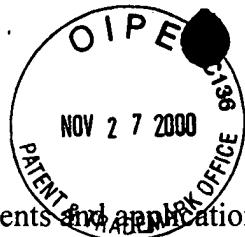
20 Again, it is respectfully suggested that the combination of Plourde which deals with static cling technology and Ross which deals with see-through panel technology is

not appropriate as there is no suggestion within Ross of the problems of applying ink jet images to one-way see-through films. Thus, one skilled in the art would not normally appreciate this problem nor seek a resolution by combining Ross and Plourde. One dealing with the problem of producing one-way vision panels would not normally be commended to static cling technology. It is only with the hindsight provided by the applicant's disclosure that this combination is one which would be considered by a skilled investigator.

5 Accordingly, it is believed that Claims 11 to 20 as presented before the Examiner are clearly distinguishable over the prior art. Claim 11 is specific to the combination of 10 see-through structure with an ink jet receptive coating which encapsulates the ink. Claim 20 includes similar language. New Claim 21 is specific to a panel having a coated polyester which includes clay as an encapsulating agent.

15 The rejection under obvious type double patenting is also noted. It is submitted that this rejection be withdrawn as the Applicant's '437 patent, while dealing with one-way see-through panels assemblage, does not deal with the problem of ink coating adherence. Rather, this patent deals with panels of this type which have a retro reflective sheet material over at least a portion of the surface so that the viewed surface is enhanced by a retro reflective so light rays impeding on a surface are reflected towards a source of illumination.

20 The one-way test set forth in In re Berg, 46 USPQ2d 1226 (Fed. Cir 1998) inquires whether the application claims are obvious over the patent claims. A review of



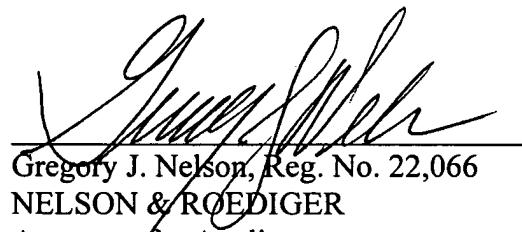
the patents and application claims indicates this inquiry should be answered in a negative.

In view of the foregoing, it is believed all of the claims are presently in condition for allowance and a favorable action is solicited. If there are any remaining issues to be resolved the Examiner is requested to call the undersigned attorney of record.

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Respectfully submitted,

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Gregory J. Nelson, Reg. No. 22,066
NELSON & ROEDIGER
Attorneys for Applicant
3333 E. Camelback Road, Suite 212
Phoenix, AZ 85018
(602) 263-8782

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